

(56)

References Cited

U.S. PATENT DOCUMENTS

7,309,830	B2	12/2007	Zhang et al.	
7,623,340	B1	11/2009	Song et al.	
8,257,867	B2	9/2012	Liu et al.	
2002/0022122	A1	2/2002	Hirata et al.	
2002/0054995	A1*	5/2002	Mazurkiewicz	428/364
2003/0086859	A1*	5/2003	Kawakami et al.	423/447.1
2004/0120880	A1	6/2004	Zhang et al.	
2004/0131934	A1	7/2004	Sugnaux et al.	
2004/0137225	A1	7/2004	Balkus, Jr. et al.	
2004/0150140	A1	8/2004	Zhan et al.	
2006/0154071	A1	7/2006	Homma et al.	
2007/0092432	A1	4/2007	Prud'homme et al.	
2007/0158618	A1	7/2007	Song et al.	
2007/0212538	A1	9/2007	Niu	
2007/0281854	A1	12/2007	Harbour et al.	
2008/0063585	A1	3/2008	Smalley et al.	
2008/0258359	A1*	10/2008	Zhamu et al.	264/673
2008/0279756	A1	11/2008	Zhamu et al.	
2008/0302561	A1	12/2008	Prud'homme et al.	
2008/0312368	A1	12/2008	Prud'homme et al.	
2009/0117467	A1	5/2009	Zhamu et al.	
2009/0246625	A1	10/2009	Lu	
2009/0290897	A1	11/2009	Doshoda et al.	
2009/0291270	A1	11/2009	Zettl et al.	
2009/0297947	A1	12/2009	Deng et al.	
2009/0303660	A1	12/2009	Nair et al.	
2009/0305135	A1	12/2009	Shi et al.	
2010/0081057	A1	4/2010	Liu et al.	
2010/0143798	A1	6/2010	Zhamu et al.	
2010/0159366	A1	6/2010	Shao-Horn et al.	
2010/0176337	A1	7/2010	Zhamu et al.	
2011/0033746	A1	2/2011	Liu et al.	
2011/0045347	A1	2/2011	Liu et al.	
2011/0051316	A1	3/2011	Liu et al.	
2011/0052981	A1	3/2011	Lopez et al.	
2011/0111299	A1	5/2011	Liu et al.	
2012/0088158	A1	4/2012	Liu et al.	
2012/0295027	A1	11/2012	Liu et al.	
2012/0295096	A1	11/2012	Liu et al.	

FOREIGN PATENT DOCUMENTS

CN	1793451	6/2006		
CN	101048055	10/2007		
CN	101139090	3/2008		
JP	H10-233211	* 9/1998	H01M 4/08
WO	WO2007/015710	2/2007		
WO	WO2007/061945	5/2007		
WO	WO 2008/013380	* 1/2008	H01M 4/00
WO	WO2008/106991	9/2008		
WO	WO 2008/143692	* 11/2008	C01B 31/00
WO	WO2009/023051	2/2009		
WO	WO2009/085015	7/2009		
WO	WO2010/014215	2/2010		
WO	WO2010/030361	3/2010		
WO	WO2011/019764	2/2011		
WO	WO2011/019765	2/2011		

OTHER PUBLICATIONS

Wang et al Journal of The Electrochemical Society A563-A570 2004.*
Murakami et al. (Materials Science forum vol. 445-446 2004 pp. 331-333 Abstract and Introduction).*
Lee (Journal of Power Sources vol. 90 2000 pp. 70-75).*
Wakihara (Lithium Ion Batteries Fundamentals and Performance; Wakihara et al. ed. 1998 New York Wiley).*
Bonard et al. (Advanced Materials 1997 vol. 9 No. 10 pp. 827-831).*
Kang et al. (Journal of the Korean Electrochemical Society 2002, vol. 5, No. 2, pp. 52-56 with USPTO English Translation.*
USP (Sodium Lauryl Sulfate MSDS USP Rockville MD May 24, 2004 and Oct. 28, 2010).*
Novosolov et al. (Science, Oct. 22, 2004 vol. 306 pp. 666-669).*

Aksay et al., "Biomimetic Pathways for Assembling Inorganic Thin Films," *Science* 273:892-898 (Aug. 1996).
Aricò et al., "Nanostructured materials for advanced energy conversion and storage devices," *Nature Materials* 4:366-377 (May 2005).
Armstrong et al., "TiO₂-B Nanowires," *Angewandte Chemie—International Edition* 43:2286-2288 (Apr. 2004).
Armstrong et al., "TiO₂(B) Nanowires as an Improved Anode Material for Lithium-Ion Batteries Containing LiFePO₄ or LiNi_{0.5}Mn_{1.5}O₄ Cathodes and a Polymer Electrolyte," *Advanced Materials* 18:2597-2600 (Oct. 2006).
Asefa et al., "Periodic mesoporous organosilicas with organic groups inside the channel walls," *Nature* 402:867-871 (Dec. 1999).
Atkin et al., "Self-Assembly of a Nonionic Surfactant at the Graphite/Ionic Liquid Interface," *Journal of the American Chemical Society* 127:11940-11941 (Aug. 2005).
Attard et al., "Mesoporous Platinum Films from Lyotropic Liquid Crystalline Phases," *Science* 278:838-840 (Oct. 1997).
Bagshaw et al., "Templating of Mesoporous Molecular Sieves by Nonionic Polyethylene Oxide Surfactants," *Science* 269:1242-1244 (Sep. 1995).
Baudrin et al., "Structural evolution during the reaction of Li with nano-sized rutile type TiO₂ at room temperature," *Electrochemistry Communications* 9:337-342 (Feb. 2007).
Berger et al., "Electronic Confinement and Coherence in Patterned Epitaxial Graphene," *Science* 312:1191-1196 (May 2006).
Bonard et al., "Purification and Size-Selection of Carbon Nanotubes," *Advanced Materials* 9(10):827-831 (month unknown 1997).
Braun et al., "Semiconducting superlattices template by molecular assemblies," *Nature* 380:325-328 (Mar. 1996).
Chen et al., "Mechanically Strong, Electrically Conductive, and Biocompatible Graphene Paper," *Advanced Materials* 20:3557-3561 (Jul. 2008).
Chen et al., "Reducing Carbon in LiFePO₄/C Composite Electrodes to Maximize Specific Energy, Volumetric Energy, and Tap Density," *Journal of the Electrochemical Society* 149(9):A1184-A1189 (Sep. 2002).
Choi et al., "Li-ion batteries from LiFePO₄ cathode and anatase/graphene composite anode for stationary energy storage," *Electrochemistry Communications* 12(3):378-381 (Jan. 2010).
Decher, "Fuzzy Nanoassemblies: Toward Layered Polymeric Multicomposites," *Science* 277(9):1232-1237 (Aug. 1997).
Dikin et al., "Preparation and characterization of graphene oxide paper," *Nature* 448:457-460 (Jul. 2007).
Dominko et al., "Impact of the Carbon Coating Thickness on the Electrochemical Performance of LiFePO₄/C Composites," *Journal of the Electrochemical Society*, 152(3):A607-A610 (Jan. 2005).
Erjavec et al., "RuO₂-wired high-rate nanoparticulate TiO₂ (anatase): Suppression of particle growth using silica," *Electrochemistry Communications*, 10:926-929 (Jun. 2008).
Final Office action from U.S. Patent and Trademark Office for U.S. Appl. No. 12/852,794, mailed Jul. 3, 2012.
Franger et al., "Optimized Lithium Iron Phosphate for High-Rate Electrochemical Application," *Journal of the Electrochemical Society*, vol. 151, No. 7, pp. A1024-A1027 (May 2004).
Gómez-Navarro et al., "Electronic Transport Properties of Individual Chemically Reduced Graphene Oxide Sheets," *Nano Letters*, 7(11):3499-3503 (Oct. 2007).
Goward et al., "Poly(pyrrole) and poly(thiophene)/vanadium oxide interleaved nanocomposites: positive electrodes for lithium batteries," *Electrochimica Acta* 43(10-11):1307-1303 (Apr. 1998).
Guo et al., "Superior Electrode Performance of Nanostructured Mesoporous TiO₂ (Anatase) through Efficient Hierarchical Mixed Conducting Networks," *Advanced Materials* 19:2087-2091 (Jul. 2007).
Herle et al., "Nano-network electronic conduction in iron and nickel olivine phosphates," *Nature Materials* 3:147-152 (Feb. 2004).
Hu et al., "High Lithium Electroactivity of Nanometer-Sized Rutile TiO₂," *Advanced Materials* 18:1421-1426 (Apr. 2006).
Hu et al., "Improved Electrode Performance of Porous LiFePO₄ Using RuO₂ as an Oxidic Nanoscale Interconnect," *Advanced Materials* 19:1963-1966 (Jul. 2007).